

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: June 5, 1996  
Date Received: May 31, 1996  
Project: 7238, Metro Self Monitor, PO#M53487  
Date Samples Extracted: June 3, 1996  
Date Extracts Analyzed: June 4, 1996

**RESULTS FROM THE ANALYSIS OF THE PROCESS WATER SAMPLE  
FOR CHROMIUM, COPPER, NICKEL, ZINC**

**USING METHOD 6010**

**Samples Processed Using Method 3005A**

Results Reported as mg/L (ppm)

<u>Sample ID</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M53487	0.47	0.39	0.34	<0.05
Method Blank	<0.05	<0.05	<0.05	<0.05

**FRIEDMAN & BRUYA, INC.**

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Date of Report: June 5, 1996

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**QUALITY ASSURANCE RESULTS  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Laboratory Code: 69421 (Duplicate)

<u>Analyte:</u>	<u>Reporting Units</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>Relative Percent Difference</u>	<u>Acceptance Criteria</u>
Chromium	mg/L (ppm)	0.47	0.44	7	0-20
Copper	mg/L (ppm)	0.39	0.38	3	0-20
Nickel	mg/L (ppm)	0.34	0.33	3	0-20
Zinc	mg/L (ppm)	<0.05	<0.05	nm	0-20

Laboratory Code: 69421 (Matrix Spike)

<u>Analyte:</u>	<u>Reporting Units</u>	<u>Spike Level</u>	<u>Sample Result</u>	<u>% Recovery</u>		<u>Acceptance Criteria</u>	<u>Relative Percent Difference</u>
				<u>MS</u>	<u>MSD</u>		
Chromium	mg/L (ppm)	5	0.47	92	93	80-120	1
Copper	mg/L (ppm)	5	0.39	92	97	80-120	5
Nickel	mg/L (ppm)	10	0.34	91	94	80-120	3
Zinc	mg/L (ppm)	5	<0.05	97	96	80-120	1

Laboratory Code: Spike Blank

<u>Analyte:</u>	<u>Reporting Units</u>	<u>Spike Level</u>	<u>% Recovery</u>		<u>Acceptance Criteria</u>	<u>Relative Percent Difference</u>
			<u>MS</u>	<u>MSD</u>		
Chromium	mg/L (ppm)	5	103	101	80-120	2
Copper	mg/L (ppm)	5	101	103	80-120	2
Nickel	mg/L (ppm)	10	103	101	80-120	2
Zinc	mg/L (ppm)	5	103	102	80-120	1

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

KNS AI  
5.31.96  
11:10

Send Report To:

Contact GERARD / Kamps

City, State, Zip Seattle WA 98134

Date 5/31/86

PURCHASE ORDER #

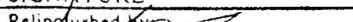

m 53487

### PROJECT LOCATION

3200 6th Ave S.

### SAMPLE DISPOSAL INFORMATION

☐ Dispose after 30 days  
☒ Return Samples  
☐ Call for Instructions

SIGNATURE	PRINT NAME	COMPANY	Date	Time
Relinquished by: 	Gerald Thompson	A. C. W	5/31/96	10:30a
Received by: 	Cathy Downing	F&B, I	5/31/96	10:30
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Andrew John Friedman  
James E. Bruya, Ph.D.  
(206) 285-8282

3012 16th Avenue West  
Seattle, WA 98119-2029  
FAX: (206) 283-5044

June 5, 1996

Gerald Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

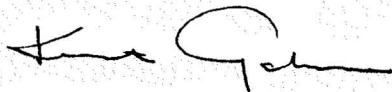
Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on May 31, 1996 from your 7238, Metro Self Monitor, PO#M53487 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Kurt Johnson  
Chemist

keh  
Enclosures  
ACU0605R.DOC



FRIEDMAN & BRUYA, INC.

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June 5, 1996

INVOICE # 96ACU0605-1  
DUPLICATE COPY

Accounts Payable  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

RE: Project 7238, Metro Self Monitor, PO#M53487: Results of testing requested  
by Gerald Thompson, Project Manager for material submitted on May 31,  
1996.

1 process water sample analyzed for  
Chromium, Copper, Nickel, Zinc  
using Method 6010 @ \$65 per sample

\$ 65.00

Amount Due .....

\$ 65.00